A METHOD AND SYSTEM FOR ASSESSING THE QUALITY AND COST OF INSPECTION

ABSTRACT

A method, system, and software for assessing the cost tradeoffs associated with performing inspection includes determining measurement variations and product characteristic variations to define an inspection plane. The inspection plane is divided into a plurality of regions corresponding to respective different outcomes resulting from an inspection process. The probability of each outcome is determined based on a probability mass in each region of the inspection plane, wherein the probability mass is based on a joint probability density of the measurement and product characteristic variations. Costs are associated to various outcomes based on the inspection process, and overall costs of the inspection process are computed by using the associated costs and the determined probability of each outcome based on the regions of the inspection plane.

Figures